

S/N 09/508,713

Page 13

LAKE012

**REMARKS*****Status of the Application:***

Claims 1–51 are the claims of record of the application. Prior to this Office Action, claims 7–42 were withdrawn and claims 1–6 and 43–51 were the claims elected for examination.

The examiner has stated that the restriction requirement of March 15, 2004 is being replaced by a new restriction requirement, and that the Office Action of July 1, 2005 is vacated.

Because March 15, 2004 restriction requirement is being replaced, it is assumed to be vacated. The original restriction requirement preceded the January 7, 2005 Office Action and Applicants' response thereto. Therefore, 1) the January 7, 2005 Office Action is also assumed to be vacated, and Applicants' response to the January 7, 2005 Office Action is also vacated because it is based on an election of a species according to a vacated restriction requirement.

Claims 1–51 are subject to a restriction and/or election requirement.

***Telephone Interview on July 13, 2005***

Applicants and the undersigned appreciate the Examiner's and her Supervisor's attention and courtesy during the telephone interview held July 13, 2005 between the Examiner, her Supervisor Vivian Chin, and the undersigned. Discussed were the invention, the restriction requirement of March 15, 2004, and Examiner's last Office Communication stating that the response received to the Office Action of January 7, 2005 was improper. An argument was presented by the undersigned that Examiner's statement that Applicants were switching species in their response to the January 7, 2005 Office Action was wrong, and that FIG. 3 was generic to at

S/N 09/508,713

Page 14

LAKE012

least FIGS. 4 through 9, and that claims did not include features that the Examiner asserted characterized species I.

Agreement was reached that the original restriction requirement of March 15, 2004 was improper in that there was a generic claim to many of the species. The Examiner and Supervisor stated that the restriction requirement of March 15, 2004 is to be voided, and a replacement restriction requirement would be issued.

### ***Vacating of Previous Office Action(s)***

The examiner has stated that the restriction requirement of March 15, 2004 is being replaced by a new restriction requirement, and that the Office Action of July 1, 2005 is vacated.

Because March 15, 2004 restriction requirement is being replaced, it is assumed to be vacated. The original restriction requirement preceded the January 7, 2005 Office Action and Applicants' response thereto. Therefore, 1) the January 7, 2005 Office Action is also assumed to be vacated, and Applicants' response to the January 7, 2005 Office Action is also vacated because it is based on an election of a species according to a vacated restriction requirement.

### ***New Election/Restrictions***

In paragraph 2-3 of the Office Action, the Examiner has replaced the March 15, 2004 restriction requirement with a new restriction requirement asserts that there are TEN species with corresponding claims as follows (NOTE: the claims prior to the restriction requirement of March 15, 2004 are assumed to be the subject claims).

- Species I shown in Figs. 3 and 4 with corresponding claims 1-5, 7-12, 20 and 36-49.

S/N 09/508,713

Page 15.

LAKE012

- Species II shown in Figs. 3 and 5, with corresponding claims 1–4, 6, 13–17, 20 and 43–49.
- Species III shown in Figs. 3 and 6, with corresponding claims are 1–4, 18, 19 and 43–49.
- Species IV shown in Figs. 7 and 8, with corresponding claims are Claims 1–4, 6, 13, 14, 16, 17, 20–23, 30 and 43–49.
- Species V shown in Figs. 7 and 9, with corresponding claims are Claims 1–4, 18–30 and 43–51.
- Species VI shown in Fig. 17, with no claims correspond to this species, according to the examiner.
- Species VII shown in Figs. 16, 18 and 19, with corresponding claims 31–33.
- Species VIII shown in Figs. 16, 18 and 20 with no claims correspond to this species, according to the examiner.
- Species IX shown in Figs. 18 and 21, with corresponding claims 31, 32 and 34.
- Species X shown in Figs. 18 and 22, with corresponding claim Claims 31, 32, 34 and 35.

The examiner further asserts that no claim is generic.

### ***Response and Election***

As Applicants are required to make an election, *Applicants elect Species I with corresponding claims 1–5, 7–12, 20 and 36–49 WITH TRAVERSAL.*

S/N 09/508,713

Page 16

LAKE012

***The restriction requirement is improper***

The present restriction requirement is improper. The claims sets corresponding to the species include many common claims, yet the examiner asserts there are NO generic claims. That is, there are claims that correspond to more than one species, yet the Examiner has asserted there are no generic claims. For example:

Claims 1-4, 20, and 43-49 are common to species I and II.

Claims 1-4, and 43-49 are common to species I and III and to species II and III.

Claims 1-4, 20 and 43-49 are common to Species I and IV, and claims 1-4, 13, 14, 16, 17, 20 and 43-49 are common to Species II and IV.

Claims 1-4, 20 and 43-49 are common to Species I and IV, and claims 1-4, 13, 14, 16, 17, 20 and 43-49 are common to Species I and V.

Claims 1-4, 20 and 43-49 are common to Species I and V and to species II and V, claims 1-4, 18, 19, 43-49 are common to Species III and V, and claim 1-4, 20-23, 30 and 43-49 are common to species IV and V.

Claim 31-32 are common to Species VII, species IX., and species X.

Claim 31-32, and 35 are common to Species IX and species X.

Therefore, by Examiner's own admission, the common corresponding claims of the different species are not distinct. Furthermore, these claims of different species are not independent. See MPEP 802.01 for the meanings of independent and distinct. See MPEP 803 for when a restriction is proper.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

S/N 09/508,713

Page 17

LAKE012

***Examiner's reasoning for the different species is improper***

In addition, Examiner's reasoning for the different species is improper, as can be seen from the following arguments.

**Species I:** In paragraph 4 of the office action, the Examiner states that the special technical feature of species I invention is the particular for the AC-3 inputs in combination with a first mixing matrix means, a filter system and a second mixing matrix means.

This is clearly erroneous. FIG. 3 does not show AC-3 inputs. Furthermore, claims 1-4, 20, and 43-49 do not recite AC-3 inputs.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species II:** In paragraph 5 of the office action, the Examiner states that the special technical feature of the species II invention is the particular of stereo inputs in combination with a first mixing matrix means, a filter system and a second mixing matrix means claimed therein.

This also is clearly erroneous. FIG. 3 does not show stereo inputs. Furthermore, claims 1-4, 20, and 43-49 do not recite stereo inputs.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species III:** In paragraph 6 of the office action, the Examiner states that the special technical feature of the species III invention is the particular of surround sound signals with anti-phase HRTF for the sum and difference signals among the surround sound signals claimed therein.

S/N 09/508,713

Page 18

LAKE012

This also is clearly erroneous. For example, claims 1–4, and 43–49 do not recite sum and difference signals, nor do they recite an anti-phase HRTF.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species IV:** In paragraph 7 of the office action, the Examiner states that the special technical feature of species IV is the particular of a first mixing matrix interconnected to the stereo inputs and a series of feedback inputs from a filter system claimed therein.

This also is clearly erroneous. For example, claims 1–4, 20, and 43–49 do not recite stereo inputs; claims 1–4, and 43–49 do not recite a series of feedback inputs from a filter system claimed therein.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species V:** In paragraph 8 of the office action, the Examiner states that the special technical feature of the species V is the particular of mixing the feedback signal from a filter system with the frontal portions of surround audio inputs to the reverberation part of the response is weighted toward the front of the listener claimed therein.

This also is clearly erroneous. For example, at least claims 1–4, 18–20, and 43–49 do not recite mixing the feedback signal from a filter system with the frontal portions of surround audio inputs to the reverberation part of the response and weighting toward the front of the listener.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

S/N 09/508,713

Page 19

LAKE012

**Species VII:** In paragraph 9 of the office action, the Examiner states that the special technical feature of the species VII is the particular of a recursive filter structure has a longer reverberation decay time than a second recursive filter structure as claimed therein.

This also is clearly erroneous. For example, none of claims 31 or 32 includes a recursive filter structure has a longer reverberation decay time than a second recursive filter structure.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species IX:** In paragraph 10 of the office action, the Examiner states that the special technical feature of species IX is the particular of a series of recursive filter structures interconnected to sum and difference filters.

This also is clearly erroneous. For example, none of claims 31 or 32 includes sum and difference filters.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

**Species X:** In paragraph 11 of the office action, the Examiner states that the special technical feature of species X is the particular of a portion of the output from one of FIR filters is fed back to the input of one of at least one of the recursive filter structures.

This also is clearly erroneous. For example, none of claims 31, 32, or 34 includes that a portion of the output from one of FIR filters is fed back to the input of one of at least one of the recursive filter structures sum and difference filters.

If only for this reason, vacation of the present restriction requirement, and a new Office Action are respectfully requested.

S/N 09/508,713

Page 20

LAKE012

**Conclusion**

While the Applicants have elected a Species and claims that the examiner asserts correspond thereto for examination, the election is believed erroneous. Vacation of the present restriction requirement, and a new Office Action are respectfully requested.

If the Examiner has any questions or comments that would advance the prosecution and allowance of this application, an email message to the undersigned at dov@inventek.com, or a telephone call to the undersigned at +1-510-547-3378 is requested.

Respectfully Submitted,

Aug. 8, 2005  
Date

  
Dov Rosenfeld, Reg. No. 38687

## Address for correspondence:

Dov Rosenfeld  
5507 College Avenue, Suite 2,  
Oakland, CA 94618  
Tel. 510-547-3378  
Fax: +1-510-291-2985  
Email: dov@inventek.com